CERTIFICATE OF MAILING PURSUANT TO 37 C.F.R. §1.8

- 0005 0

I, <u>Caitlin L. Gardner</u>, hereby certify that this correspondence, pursuant to 37 C.F.R. §1.8, is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop mendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on:

Date: June 23, 2005

By Carllin Gardner

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s):

Paul V. Cooper

Docket No.:

23438.00045

Application No.:

10/773,101

Group Art Unit:

Filing Date:

February 4, 2004

Examiner:

TITLE:

SYSTEM FOR RELEASING GAS INTO MOLTEN METAL

# INFORMATION DISCLOSURE STATEMENT PURSUANT TO 37 C.F.R. §§1.97-1.98

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

### Commissioner:

In accordance with the duty of disclosure under 37 C.F.R. § 1.56 and pursuant to 37 C.F.R. §§ 1.97-1.98, applicants hereby notify the U.S. Patent and Trademark Office of the documents listed on the attached Form PTO-1449. One copy of each foreign documents listed are submitted herewith. In addition, English language transcripts for each non-English document are also provided and are believed to supply a concise explanation of relevance.

The submission of the listed documents is not intended as an admission that any such documents constitute prior art against the claims of the present application. Applicants reserve the right to dispute any of the listed documents as prior art during examination. Further, applicants do not waive any right to take any action that would be appropriate to antedate or otherwise remove any listed document as a competent reference against the claims of the present application. Furthermore, the submission of this Information Disclosure Statement is not to be construed as a representation that a search has been made or that no other material information may exist.

In accordance with 37 C.F.R. §1.97(b), since a first Office Action on the merits has not yet been issued in the subject application, neither a statement under 37 C.F.R. §1.97(e) nor payment of a fee is required for consideration of this Information Disclosure Statement.

Applicants respectfully submit that all pending claims are patentable over the foregoing references, alone or in combination. The Examiner is requested to initial the enclosed Form PTO-1449 and return a copy thereof to the undersigned.

Respectfully submitted,

Matthew J. Evans Reg. No. 56,530

Date

PTO-1449

June 23, 2005

Transmittal

13 Foreign References

Phoenix/325495.1

**Enclosures:** 

RTIFICATE OF MAILING PURSUANT TO 37 C.F.R. §1.8

I, <u>Caitlin L. Gardner</u>, hereby certify that this correspondence, pursuant to 37 C.F.R. §1.8, is being sosited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop mendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on:

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By Carllon

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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SYSTEM FOR RELEASING GAS INTO MOLTEN METAL

## TRANSMITTAL PURSUANT TO 37 C.F.R. §1.97-1.98

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

#### Commissioner:

Submitted herewith pursuant to 37 C.F.R. §1.97(c) are (1) an Information Disclosure Statement, (2) an Information Disclosure Citation Form PTO-1449, and (3) copies of the foreign references cited on the enclosed Form PTO-1449.

This statement does NOT authorize charge of the issue fee. The Commissioner is hereby authorized to charge any fee specifically authorized hereafter, or any deficiency in the fee(s) filed, or asserted to be filed, or which should have been filed herewith or concerning any paper filed hereafter, and which may be required under 37 C.F.R.§§1.16-1.18 (deficiency only) now or hereafter relative to this application and the resulting official document under 37 C.F.R. §1.20, or credit any overpayment to Account No. 19-3878 for which purpose a duplicate copy of this sheet is attached.

Respectfully submitted,

June 23, 2005

Date

Matthew J. Evans

Reg. No. 56,530

SQUIRE, SANDERS & DEMPSEY L.L.P. Two Renaissance Square 40 North Central Avenue, Suite 2700 Phoenix, Arizona 85004-4498 (602) 528-4124

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	1,100,475	06-16-14	Franckaerts				
<u>.</u>	1,331,997	02-24-1920	Neal				
	1,454,967	05-15-1923	Gill				
	1,518,501	12-09-1924	Gill				
	1,522,765	01-13-1925	Wilke				·.
	1,526,851	02-17-1925	Hall	<del> </del>			
	1,669,668	05-15-1928	Marshall		-		
	1,673,594	06-12-1928	Schmidt				
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,,,,, ** **	1,185,314	03-25-1970	UK			7,,,,,	
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	392,268	09-1965	Switzerland			Ye	
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		1,717,969	06-18-1929	Goodner				
		1,896,201	02-07-1933	Sterner-Rainer				
		2,038,221	04-21-1936	Kagi				
		209,219	10-22-1878	Bookwalter	<del> </del>			
		2,280,979	04-28-1942	Rocke				
·		2,290,961	07-28-1942	Heuer				
		2,488,447	11-15-1949	Tangen et al				
		251,104	12-20-1881	Finch				
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		416,401	06-1974	Soviet Union			Y.	es tract
		58-048796	03-1983	Japan			Y	
		63-104773	5-1998	Japan			Y	es tract
		683,469	03-31-1964	Canada				
		773,312	10-1980	Soviet Union			Y Absi	es
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	-	2,515,478	07-18-1950	Tooley et al.				
		2,528,210	10-31-1950	Stewart				
		2,566,892	09-04-1951	Jacobs				
		2,677,609	05-04-1954	Moore et al.			· · · · · · · · · · · · · · · · · · ·	
		2,698,583	01-04-1955	House et al.				
		2,787,873	04-09-1957	Hadley				
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		2,808,782	10-08-1957	Thompson et al.				
		2,821,472	01-28-1958	Peterson et al.				
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		DOCUMENT				SUB-	TRANSL	ATION
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		90,756	01-1958	Norway			Ye Ahstı	
		942,648	11-27-1963	U.K.				
		WO 98/25031	06-11-1998	WO				
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		2,832,292	04-29-1958	Edwards				
		2,865,618	12-23-1958	Abell				
		2,901,677	08-25-1959	Chessman et al.				
		2,948,524	08-09-1960	Sweeney et al.				
		2,978,885	04-11-1961	Davison		-		
	-	2,984,524	05-16-1961	Franzen				•
		2,987,885	06-13-1961	Hodge				
		3,010,402	11-28-1961	King				
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<sup>\*</sup>EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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		3,048,384	08-07-1962	Sweeney et al.				
		3,070,393	12-25-1962	Silverberg et al.				
		3,092,030	06-04-1963	Wunder	1			
		3,227,547	01-04-1966	Szekely				
		3,244,109	04-05-1966	Barske				
		3,251,676	05-17-1966	Johnson				
		3,255,702	06-14-1966	Gehrm				
		3,272,619	09-13-1966	Sweeney et al.			<del></del>	
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		3,512,762	05-19-1970					
		3,439,340	01-06-1970					
		3,459,133 08-05-1969						-
	3,417,929 12-24-196 3,459,133 08-05-196							
·		3,400,923	09-10-1968					
		3,291,473	12-13-1966					
		3,289,473	12-06-1966					
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		3,512,788	05-19-1970	Kilbane				
		3,575,525	04-20-1971	Fox et al.				
		3,618,917	11-09-1971	Fredrikson				
		364,804	06-14-1887	Cole				
	3,650,730 03-21-19		03-21-1972	Derham et al.				
		3,689,048	09-05-1972	Foulard, et al.				
		3,715,112	02-06-1973	Carbonnel				
		3,743,500	07-03-1973	Foulard et al.				
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<sup>\*</sup>EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449 (REV. 8-83)		PARTMENT OF COMM AND TRADEMARK OF		ATTY. DOCKET NO 23438.00045	O.	APPLICA 10/773,10	ATION NO	).
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		3,743,263	07-03-1973	Szekely				
		3,753,690	08-21-1973	Emley et al.				
		3,759,635	09-18-1973	Carter et al.				
		3,767,382	10-23-1973	Bruno et al.				
	···· • ·	3,776,660	12-04-1973	Anderson et al.				
		3,785,632	01-15-1974	Kraemer, et al.				
		3,814,400	06-04-1974	Seki				
		3,824,042	07-16-1974	Barnes et al.				
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DATE CONSIDERED **EXAMINER** 

<sup>\*</sup>EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449 (REV. 8-83)		EPARTMENT OF COMME T AND TRADEMARK OF		ATTY. DOCKET NO 23438.00045	).	APPLICA 10/773,10	TION NO	).	
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		3,966,456	06-29-1976	Ellenbaum et al.					
	-	3,972,709	08-03-1976	Chin et al.					
		3,984,234	10-05-1976	Claxton et al.	1				
		3,985,000	10-12-1976	Hartz					
	3,997,336 12-14		12-14-1976	van Linden et al.					
		4,003,560	01-18-1977	Carbonnel					
		4,018,598	04-19-1977	Markus					
	-	4,052,199	10-04-1977	Mangalick					
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		4,055,390	10-25-1977	7 Young				
		4,068,965	01-17-1978	B Lichti				
		4,091,970	05-30-1978	Kimiyama et al.				
		4,119,141	10-10-1978	Thut et al.				
		4,126,360	11-21-1978	Miller et al.				
		4,128,415	12-05-1978	van Linden et al.				
		4,144,562	03-13-1979	Cooper				
		4,169,584	10-02-1979	Mangalick				
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<sup>\*</sup>EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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APPLICATION NO. Form PTO-1449 U.S. DEPARTMENT OF COMMERCE ATTY. DOCKET NO. (REV. 8-83) PATENT AND TRADEMARK OFFICE 10/773,101 23438.00045 INFORMATION DISCLOSURE APPLICANT **CITATION** Paul V. Cooper **GROUP** FILING DATE (Use several sheets if necessary) UNKNOWN February 4, 2004 SYSTEM FOR RELEASING GAS INTO MOLTEN METAL **U. S. PATENT DOCUMENTS** FILING SUB-DATE IF **DOCUMENT EXAMINER** APPROPRIATE **CLASS CLASS NAME** INITIAL REF NUMBER DATE Cooper et al. 4,192,011 03-04-1980 4,213,091 07-15-1980 Cooper 07-15-1980 4,213,176 Cooper 08-26-1980 Cooper et al. 4,219,882 4,244,423 01-13-1981 Thut et al. 4,286,985 09-01-1981 van Linden et al. 4,322,245 03-30-1982 Claxton 4,347,041 08-31-1982 Cooper FOREIGN PATENT DOCUMENTS TRANSLATION SUB-**DOCUMENT CLASS COUNTRY** CLASS YES DATE REF NUMBER OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

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<sup>\*</sup>EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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		4,456,424	06-26-1984						
		4,410,299	10-18-1983		<u> </u>				
			07-12-1983	<u> </u>	-				
	<u>.</u> .,	4,372,541	03-08-1983						
		4,370,096	02-08-1983		-				
		4,360,314 4,370,096	01-25-1982						
		4,351,514	09-28-1982 11-23-1982						
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		4,456,974	06-26-1984	Cooper							
		4,470,846	09-11-1984	Dube			<del></del>				
		4,489,475	12-25-1984	Struttmann		-					
		4,504,392	03-12-1985	Groteke							
		4,537,624	08-27-1985	Tenhover et al.							
		4,537,625	08-27-1985	Tenhover et al.							
		4,556,419	12-03-1985	Otsuka et al.							
		4,557,766	12-10-1985	Tenhover et al.							
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		4,586,845	05-06-1986								
		4,593,597	06-10-1986	Albrecht et al.							
		4,598,899	07-08-1986	Cooper							
		4,600,222	07-15-1986	Appling							
		4,609,442	09-02-1986	Tenhover et al.	_						
		4,611,790	09-16-1986	Otsuka et al.							
		4,634,105	01-06-1987	Withers et al.							
		4,640,666	02-03-1987	Sodergard							
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EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	DAT	ING FE IF PRIATE		
		4,651,806	03-24-1987	Allen et al.						
		4,696,703	09-29-1987	Henderson et al.						
		4,701,226	10-20-1987	Henderson et al.						
		4,714,371	12-22-1987	Cuse						
		4,717,540	01-05-1988	McRae et al.						
	:	4,743,428	05-10-1988	McRae et al.						
		4,747,583	05-31-1988	Gordon et al.			<u></u>			
		4,770,701	09-13-1988	Henderson et al.	"					
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<sup>\*</sup>EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449 (REV. 8-83)		EPARTMENT OF COMMI T AND TRADEMARK OF		ATTY. DOCKET NO 23438.00045	).	APPLICA 10/773,10	ATION NO. )1			
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		4,786,230	11-22-1988	Thut						
		4,802,656	02-07-1989	Hudault et al.						
		4,804,168	02-14-1989	Otsuka et al.						
		4,810,314	03-07-1989	Henderson et al.						
		4,834,573	05-30-1989	Asano et al.						
		4,842,227	06-27-1989	Harrington et al.						
		4,844,425	07-04-1989	Piras et al.						
		4,851,296	07-25-1989	Tenhover et al.						
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		4,859,413	08-22-1989	Harris et al.						
		4,867,638	09-19-1989	Handtmann et al.						
		4,884,786	12-05-1989	Gillespie		-				
		4,898,367	02-06-1990	Cooper						
		4,923,770	05-08-1990	Grasselli et al.						
		4,930,986	06-05-1990	Cooper						
		4,931,091	06-05-1990	Waite et al.						
		4,940,214	07-10-1990	Gillespie						
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		4,954,167	09-04-1990	Cooper						
		4,973,433	11-27-1990							
		4,989,736	02-05-1991							
		5,006,232	04-09-1991							
		5,028,211	07-02-1991							
		5,049,841	09-17-1991	•						
		506,572	10-10-1893	Wagener						
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IIIIII I		5,078,572	01-07-1992					_
		5,088,893	12-18-1992	Gilbert et al.				
	-	5,092,821	03-03-1992	Gilbert et al.				<del></del>
		5,098,134	03-24-1992	Monckton				
		5,099,554	03-31-1992	Cooper				
,		5,131,632	07-21-1992	Olson				
-		5,143,357	09-01-1992	Gilbert et al.				
		5,145,322	09-08-1992	Senior, Jr. et al.				
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		5,152,631	10-06-1992	Bauer				
		5,158,440	10-27-1992	Cooper et al.	-			
		5,162,858	11-10-1992	Shoji et al.				
		5,165,858	11-24-1992	Gilbert et al.				
		5,172,458	12-22-1992	Cooper				
		5,177,304	01-05-1993	Nagel	-			
		5,191,154	03-02-1993	Nagel				
		5,192,193	03-09-1993	Cooper et al.				
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<sup>\*</sup>EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Sheet 22 of 42 Form PTO-1449 U.S. DEPARTMENT OF COMMERCE ATTY. DOCKET NO. APPLICATION NO. (REV. 8-83) PATENT AND TRADEMARK OFFICE 23438.00045 10/773,101 INFORMATION DISCLOSURE APPLICANT **CITATION** Paul V. Cooper GROUP **FILING DATE** (Use several sheets if necessary) UNKNOWN February 4, 2004 SYSTEM FOR RELEASING GAS INTO MOLTEN METAL **U. S. PATENT DOCUMENTS** FILING SUB-DATE IF **DOCUMENT EXAMINER** APPROPRIATE **CLASS** NAME **CLASS** INITIAL REF NUMBER DATE 5,202,100 04-13-1993 Nagel et al. 5,203,681 04-20-1993 Cooper 5,209,641 05-11-1993 Hoglund et al. 06-01-1993 5,215,448 Cooper 5,268,020 12-07-1993 Claxton 5,286,163 02-15-1994 Amra et al. 5,298,233 03-29-1994 Nagel 5,301,620 04-12-1994 Nagel et al. FOREIGN PATENT DOCUMENTS TRANSLATION SUB-**DOCUMENT** COUNTRY **CLASS CLASS** YES NO **REF** DATE **NUMBER** OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

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		5,308,045	05-03-1994	Cooper				
		5,310,412	05-10-1994	Gilbert et al.				
		5,318,360	06-07-1994	Langer et al.				
	,.	5,322,547	06-21-1994	Nagel et al.				
		5,324,341	06-28-1994	Nagel et al.				
		5,330,328	07-19-1994	Cooper				
		5,354,940	10-11-1994	Nagel				
		5,358,549	10-25-1994	Nagel et al.				
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Sheet 24 of 42 Form PTO-1449 U.S. DEPARTMENT OF COMMERCE APPLICATION NO. ATTY, DOCKET NO. (REV. 8-83) PATENT AND TRADEMARK OFFICE 23438.00045 10/773,101 INFORMATION DISCLOSURE APPLICANT **CITATION** Paul V. Cooper FILING DATE **GROUP** (Use several sheets if necessary) UNKNOWN February 4, 2004 SYSTEM FOR RELEASING GAS INTO MOLTEN METAL **U. S. PATENT DOCUMENTS** FILING DATE IF SUB-DOCUMENT **EXAMINER APPROPRIATE CLASS REF** NUMBER DATE NAME **CLASS** INITIAL 10-25-1994 Nagel 5,358,697 Pelton 5,364,078 11-15-1994 11-29-1994 Gee et al. 5,369,063 5,383,651 01-24-1995 Blasen et al. Mercer II et al. 5,388,633 02-14-1995 03-07-1995 Nagel et al. 5,395,405 Nose et al. 03-21-1995 5,399,074 5,407,294 04-18-1995 Giannini FOREIGN PATENT DOCUMENTS TRANSLATION SUB-**DOCUMENT CLASS CLASS** YES NO **COUNTRY REF** NUMBER DATE OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) DATE CONSIDERED

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EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	DAT	ING FE IF PRIATE		
		5,425,410	06-20-1995	Reynolds						
		5,431,551	07-11-1995	Aquino et al.						
		5,435,982	07-25-1995	Wilkinson						
		5,436,210	07-25-1995	Wilkinson et al.						
		5,443,572	08-22-1995	Wilkinson et al.						
		5,454,423	10-03-1995	Tsuchida et al.						
		5,468,280	11-21-1995	Areaux						
		5,470,201	11-28-1995	Gilbert et al.						
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Sheet 26 of 42 U.S. DEPARTMENT OF COMMERCE Form PTO-1449 APPLICATION NO. ATTY. DOCKET NO. (REV. 8-83) PATENT AND TRADEMARK OFFICE 10/773,101 23438.00045 INFORMATION DISCLOSURE APPLICANT **CITATION** Paul V. Cooper GROUP FILING DATE (Use several sheets if necessary) UNKNOWN February 4, 2004 SYSTEM FOR RELEASING GAS INTO MOLTEN METAL **U. S. PATENT DOCUMENTS** FILING SUB-DATE IF **DOCUMENT** EXAMINER APPROPRIATE **CLASS CLASS** REF NUMBER DATE NAME INITIAL 5,484,265 01-16-1996 Horvath et al. 5,489,734 02-06-1996 Nagel et al. 5,491,279 02-13-1996 Robert et al. 5,495,746 03-05-1996 Sigworth 5,505,143 04-09-1996 Nagel 5,509,791 04-23-1996 Turner 07-23-1996 Nagel et al. 5,537,940 5,543,558 08-06-1996 Nagel et al. FOREIGN PATENT DOCUMENTS TRANSLATION SUB-DOCUMENT **CLASS COUNTRY CLASS** YES NO **REF NUMBER** DATE OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

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Form PTO-1449 U.S. DEPARTMENT OF COMMERCE ATTY, DOCKET NO. APPLICATION NO. (REV. 8-83) PATENT AND TRADEMARK OFFICE 23438.00045 10/773,101 INFORMATION DISCLOSURE APPLICANT **CITATION** Paul V. Cooper GROUP FILING DATE (Use several sheets if necessary) UNKNOWN February 4, 2004 SYSTEM FOR RELEASING GAS INTO MOLTEN METAL **U. S. PATENT DOCUMENTS** FILING SUB-DATE IF **EXAMINER DOCUMENT APPROPRIATE CLASS CLASS INITIAL** REF NUMBER DATE NAME 5,555,822 09-17-1996 Loewen et al. 5,558,501 09-24-1996 Wang et al. 5,558,505 08-24-1996 Mordue et al. 5,571,486 11-05-1996 Robert et al. 5,585,532 12-17-1996 Nagel 5,586,863 12-24-1996 Gilbert et al. 5,597,289 01-28-1997 Thut 03-18-1997 Robert 5,613,245 FOREIGN PATENT DOCUMENTS **TRANSLATION** SUB-**DOCUMENT** CLASS **CLASS** REF **NUMBER** DATE **COUNTRY** YES NO OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) **EXAMINER** DATE CONSIDERED

<sup>\*</sup>EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Sheet 28 of 42 Form PTO-1449 U.S. DEPARTMENT OF COMMERCE APPLICATION NO. ATTY. DOCKET NO. (REV. 8-83) PATENT AND TRADEMARK OFFICE 23438.00045 10/773,101 INFORMATION DISCLOSURE APPLICANT **CITATION** Paul V. Cooper FILING DATE **GROUP** (Use several sheets if necessary) UNKNOWN February 4, 2004 SYSTEM FOR RELEASING GAS INTO MOLTEN METAL **U. S. PATENT DOCUMENTS** FILING DATE IF SUB-EXAMINER **DOCUMENT** APPROPRIATE **CLASS CLASS** INITIAL **REF** NUMBER DATE **NAME** 5,622,481 04-22-1997 Thut 5,629,464 05-13-1997 Bach et al. 5,634,770 06-03-1997 Gilbert et al. 06-17-1997 Nagel et al. 5,640,706 06-17-1997 5,640,707 Nagel et al. 5,640,709 06-17-1997 Nagel et al. McEwan et al. 5,655,849 08-12-1997 5,662,725 09-02-1997 Cooper FOREIGN PATENT DOCUMENTS TRANSLATION SUB-**DOCUMENT COUNTRY** CLASS **CLASS** YES NO **REF** DATE **NUMBER** OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

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<sup>\*</sup>EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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		5,676,520	10-14-1997	Thut						
		5,678,244	10-14-1997	Shaw et al.						
		5,678,807	10-21-1997	Cooper						
		5,679,132	10-21-1997	Rauenzahn et al.						
		5,685,701	11-11-1997	Chandler et al.						
		5,690,888	11-25-1997	Robert						
		5,695,732	09-09-1997	Sparks et al.						
		5,716,195	02-10-1998	Thut						
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<sup>\*</sup>EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Sheet 30 of 42 Form PTO-1449 U.S. DEPARTMENT OF COMMERCE APPLICATION NO. ATTY, DOCKET NO. (REV. 8-83) PATENT AND TRADEMARK OFFICE 23438.00045 10/773,101 INFORMATION DISCLOSURE APPLICANT **CITATION** Paul V. Cooper GROUP (Use several sheets if necessary) FILING DATE UNKNOWN February 4, 2004 SYSTEM FOR RELEASING GAS INTO MOLTEN METAL **U. S. PATENT DOCUMENTS FILING** SUB-DATE IF **DOCUMENT EXAMINER** APPROPRIATE **CLASS** NAME CLASS **INITIAL** REF NUMBER DATE 02-10-1998 Nagel et al. 5,717,149 Flisakowski et al. 5,718,416 02-17-1998 5,735,668 04-07-1998 Klien 5,735,935 04-07-1998 Areaux Eichenmiller et al. 5,741,422 04-21-1998 Wilkinson et al. 5,744,117 04-28-1998 04-28-1998 Bell et al. 5,745,861 5,755,847 05-26-1998 Quayle FOREIGN PATENT DOCUMENTS TRANSLATION SUB-**DOCUMENT CLASS** COUNTRY **CLASS** YES NO REF NUMBER DATE OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

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		5,772,324	06-30-1998	Falk				
		5,776,420	07-07-1998	Nagel				
		5,785,494	07-28-1998	Vild et al.				
		5,805,067	09-08-1989	Bradley et al.				
		5,810,311	09-22-1998	Davison et al.				
		5,842,832	12-01-1998	Thut				
		585,188	06-29-1897	Davis				
		5,858,059	01-12-1999	Abramovich et al.	-			
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<sup>\*</sup>EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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*****		5,864,316	01-26-1999								
		5,866,095	02-02-1999	McGeever et al.							
	·· ·	5,875,385	02-23-1999	Stephenson et al.				1			
		5,935,528	08-10-1999	Stephenson et al.							
		5,944,496	08-31-1999	Cooper							
		5,947,705	09-07-1999	Mordue et al.							
		5,949,369	09-07-1999	Bradley et al.							
		5,951,243	09-14-1999	Cooper							
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<sup>\*</sup>EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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		5,993,726	11-30-1999	Huang					
		5,993,728	11-30-1999	Vild					
		5,995,041	11-30-1999	Bradley et al.					
	-	6,024,286	02-15-2000	Bradley et al.					
		6,027,685	02-22-2000	Cooper					
		6,036,745	03-14-2000	Gilbert et al.					
		6,074,455	06-13-2000	van Linden et al.					
		6,093,000	07-25-2000	Cooper					
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INTIAL		6,096,109	08-01-2000		CENSS	0200	7	
-		6,019,576	02-01-2000					
	<del></del>	6,113,154	09-05-2000	Thut				
		6,123,523	09-26-2000	Cooper				
		6,152,691	11-28-2000	Thut				
		6,187,096	02-13-2001	Thut				
		6,217,823	04-17-2001	Vild et al.				
		6,231,639	05-15-2001	Eichenmiller et al.				
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EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	DAT	ING FE IF PRIATE	
		6,243,366	06-05-2001	Bradley et al.					
		6,250,881	06-26-2001	Mordue et al.					
		6,254,340	07-03-2001	Vild et al.					
		6,270,717	08-07-2001	Tremblay et al.			-		
·		6,280,157	08-28-2001	Cooper					
		6,298,759	09-25-2001	Thut					
		6,303,074	10-16-2001	Cooper					
		6,345,964	02-12-2002	Cooper					
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		6,358,467	03-19-2002	Mordue					
		6,398,525	06-04-2002	Cooper					
		6,439,860	08-27-2002	Greer					
		6,451,247	09-17-2002	Mordue et al.				, ,,,,,	
		6,457,950	10-01-2002	Cooper et al.					
		6,464,458	10-15-2002	Vild et al.	-				
		6,495,948	12-17-2002	Garrett, III					
		6,497,559	12-24-2002	Grant					
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		6,524,066	02-25-2003	Thut					
		6,533,535	03-18-2003	Thut					
		6,551,060	04-22-2003	Mordue et al.					
	•	6,648,026	11-18-2003	Look et al.					
		6,679,936	01-20-2004	Quackenbush					
		6,689,310	02-10-2004	Cooper					
		6,695,510	02-24-2004	Look et al.					
		6,709,234	03-23-2004	Gilbert et al.					
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		6,887,424	05-03-2005	Ohno et al.	-			
		6,887,425	05-03-2005	Mordue et al.				,
		898,499	09-15-1908	O'Donnell		-		
		20010000465	04-26-2001	Thut				
		20010012758	08-09-2001	Bradley et al.				
		20020041788	04-11-2002	Look et al.			<u> </u>	
		20020102159	08-01-2002	Thut				
		20020146313	10-10-2002	Thut				
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		20020187947	12-12-2002	Jarai et al.				
		20030059302	03-27-2003	Mordue et al.				
		20030075844	04-24-2003	Mordue et al.				
		20030151176	08-14-2003	Ohno et al.				
	_	20030185679	10-02-2003	Mordue et al.				
		20040007284	01-15-2004	Look et al.				
		20040022632	02-05-2004	Thut				
		20040056395	03-25-2004	Thut				
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		20040076533	04-22-2004	Cooper					
		20040084172	05-06-2004	Vincent et al.					
		20040115079	06-17-2004	Cooper					
		20040199435	10-07-2004	Abrams et al.					
		20040123970	07-01-2004	Neff				•	
		20040215204	10-28-2004	Davison et al.					
		20040262825	12-30-2004	Cooper					
		20050013713	01-20-2005	Cooper					
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		20050013714	01-20-2005	Cooper				
		20050013715	01-20-2005	Cooper				
		20050053499	03-10-2005	Cooper				
		20050077730	04-14-2005	Thut				
		20050081607	04-21-2005	Patel et al.				
		20050116398	06-02-2005	Tremblay				
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